2024 NMS B-Mod Rules

This is intended to be an economical class. Rules will be strictly enforced, absolutely no exceptions. Experienced drivers aged 13 and over are eligible to race in this class.

Frame

1. 1964 or newer OEM perimeter rear-wheel drive passenger car frame only. No sport car frames.
2. The frame must be full and complete. It cannot be widened or narrowed and must be able to support the roll cage on both sides. Exceptions are; weight jack in original center line of spring tower allowed, frame may be cut a maximum of 36" forward from center of rear end housing, horns may be removed in front of steering box and notched maximum 1" at bottom for tie rod clearance, front cross-member may be notched and boxed for radiator and/or steering clearance, maximum 7" wide opening in side of spring tower for spring removal.
3. Maximum 2" wide by 4" tall frame stiffener may be welded directly to outside of left side frame rail.
4. Minimum wheelbase 108", maximum 112", both sides.
5. Maximum overall width shall not exceed 78" from outside of tire to outside of tire.
6. No part of the frame can be lower than 4" from the ground except the front cross-member.

Roll Cage

1. Must consist of continuous hoops, minimum 1½" O.D. tubing, with minimum wall thickness of 0.095" for main cage, and frame-mounted in at least six places. Recommended: low carbon or mild steel.
2. Must consist of a configuration of front, rear and top hoops connected by tubing on side or side hoops.
3. The drivers head must not protrude outside the cage with helmet on.
4. Roll cage must be securely supported and braced with minimum one cross bar in top halo.
5. Foot protection bar is required.
6. Main cage no further forward than rear engine. All bars forward of cage must be lower than hood.

Door Bars

1. All driver side door bars and uprights must be a minimum 1½" O.D. with 0.083" wall thickness. A minimum of three driver side door bars, parallel to the ground and perpendicular to the driver, and welded to the front and rear of the roll cage.
2. The passenger side must have at least one cross door bar, horizontal or angled, minimum 1¼" O.D. with 0.083" wall thickness, and one top door bar, minimum 1½" O.D. with 0.083" wall thickness.

Body

1. Rear spoiler maximum height from deck may not exceed 5". AllStar Performance part number: ALL22990 or build your own.

2. The nose must be mounted in an approved manner and can extend no higher than front top of hood. The nose piece must remain inside confines of front bumper and be no lower than 2" below frame horns. Cooling holes are allowed.
3. The tip of the nose can be no more than 36" from the center of front hub.
4. Fabricated aluminum nose panels must be flat. Maximum 2¼" side fins allowed on aluminum nose.
5. All bodies must be kept in good repair, with no sharp edges, subject to the discretion of officials.

Driver Compartment

1. Must have a minimum of 3 windshield bars in front of the driver. Lexan or aluminum cowl panel in front of driver can be no wider than cockpit and no further back than the steering wheel.
2. Minimum 0.125" aluminum or 0.06" steel complete floor pan required.
3. Aluminum high-back seat only and must be bolted in using minimum 0.375" bolts next to left side frame rail and ahead of rear tires. The bottom of the seat can be no lower than the bottom of the frame rail.
4. Driver must be sealed off from the track, driveline, engine, fuel cell, canisters and pumps.
5. No driver-adjustable device allowed except brake adjuster.
6. No mirrors of any kind.

Front Suspension

1. All components must be steel, unaltered OEM, in OEM location and replaceable by OEM parts. Exceptions are the following: tube-type upper A-frames with or without aluminum or steel cross shaft, and mounts can be moved; stamped steel OEM replacement lower A-frames; rubber, nylon or steel lower A-frame bushings, no offset or bearing type; welded or bolted shock mount on lower A-frame; OEM or OEM replacement rebuildable ball joints allowed.
2. Lower A-frames must be right and left, and of the same design. Lower A-frame mounts and bolt holes on frame must be within OEM specifications.
3. Sway bar on front only.
4. GM lower A-frames only.
5. No bump stop suspension. Stroke of shock must collapse to the body.

Steering

1. No rack and pinion.
2. All components must be steel, unaltered OEM, in OEM location. Exceptions are: outer and inner tie rod end and adjustment sleeve may be replaced by a minimum 0.625" steel rod end and steel tube; spindles can be ground for brake caliper clearance only; unaltered, OEM or OEM replacement Pinto spindles; bolt on spindle savers allowed; steel steering shafts and knuckles only; driver compartment steering may be modified, must be kept on left side.
3. Spindles must be right and left, and of the same design.
4. Quick release required. The steering quickner and steering wheel may be aluminum.
5. The idler arm, pitman arm and center link must match frame. No aftermarket center links.

Shocks

1. One steel, nonadjustable, unaltered shock per wheel. Pro WB Series, AFCO steel body 10 series or 12 series integra steel twin tube fixed bearing.
2. All shocks must completely collapse at any time.
3. One additional shock allow in the pull-bar area.
4. No internal or external bumpers or stops. No threaded body, coil-over, air or remote reservoir shocks. No bulb style shocks. Front half may be shielded.

Springs

1. One 5” to 5½” steel, non-progressive coil spring per wheel only.
2. One additional spring allowed on pull bar, may be progressive.
3. All coil springs must be at least 4½” OD. No torsion bars, air bag or inner liners allowed.
4. Front coil springs must be 9½” free height within ½” tolerance, rear coil springs must be 10”-16” free height and mounted on center line of rear end housing, three link design only, spring perch must be on top of axel tubes.
5. Spring rubbers allowed.

Rear Suspension

1. No independent rear suspension.
2. All components must be steel.
3. The rear frame may only be altered to accept coil springs.
4. No coil-over eliminators. Must conform to shock and spring rules.
5. All mounts must be welded or bolted solid over top of rear-end(center line of rear-end housing)
6. Shocks must be mounted to bracket below bottom of axel tube and upper frame rail.
7. Control arms must be straight and no rubber or springs.
8. One mechanical traction pull bar allowed.
9. No rear sway bars.
10. No lift bars or springs.
11. Rubber and springs are allowed on pull bar only.
12. No bump stop suspension. Stroke of shocks must collapse to the body. Exception is the following: solid safety chains securely mounted to the frame and to the axle housing only (can not be mounted to any floating devise), no springs or rubbers allowed.

Rear End

1. Any steel approved OEM passenger car or truck non-cambered rear-end (housing and carrier) allowed.
2. Safety hubs (floater) allowed.
3. All components must be steel, axel and U-joint caps and drive flange.
4. One piece drive flange only.
5. No torque dividing differentials.
6. Quick change rear ends with steel axle tubes allowed.

Bumpers

1. Steel bumpers must be on the front and rear and welded, or securely mounted with a minimum of 0.375” bolts.
2. The rear bumper must be capped, constructed of solid square, or minimum 1.24” O.D. tubing with 0.065” wall thickness, maximum 6” beyond rear deck, no wider than 5” outside rear frame rails must be bent forward 90° or constructed in a loop design.
3. Must have at least one upright, minimum 1¼” with 0.065 wall thickness, from bumper to fuel cell guard.
4. The 2 bar front bumper must have a minimum of 1¼” O.D. tubing with minimum 0.065” wall thickness (maximum 0.095”) mounted frame end, no wider width of material outside frame horns and bottom loop parallel to the ground.
5. The top bar must be directly above bottom bar, minimum 6½” apart, measured center to center.

Tires/Wheels

1. Hoosier D800
2. Aluminum or steel spacers only.
3. 15x8 steel wheels only.
4. Steel lug nuts only.

Brakes

1. Must be steel approved OEM, optional four wheel, drum or disc. Manufacturing match.
2. Must maintain minimum OEM dimensions for hubs/rotors and calipers which can’t be lightened.
3. Bolt pattern may be changed. Larger studs are allowed.
4. Rear rotors may be aftermarket 0.81” thickness (new). Vented solid surface rotors only, no scalloped or ceramic coated rotors.
5. One front to rear proportioning device is allowed.
6. Brake line must be visible.

Exhaust

1. Round tube headers only.
2. All primary header tubes must enter directly into one collector at the same point at the end of the header.
3. Collector length maximum 9” allowed.
4. Turn down maximum 10” allowed.
5. Mufflers allowed.
6. All exhaust must go through mufflers. 2 per car, 1 per header.
7. Valve covers and headers may be modified for pan-evac system.

Fuel System

1. Mechanical fuel pump only.
2. Racing fuel cell required; maximum 32-gallon capacity must be minimum 20-gauge steel container.
3. Cell must be securely mounted behind rear axle, between rear tires, minimum of 4” ahead of bumper, minimum of 10” above the ground. Must mount with minimum of 2 solid steel straps around entire cell, 2” wide and 0.125” thick. All cell mounts must be steel, securely welded to frame/cage.
4. Protective tubing must cover the rear and extend past both sides of the cell. No part of the cell shall be lower than the protective tubing.
5. Fuel cell vents, including cap vent, must have check valves.
6. If fuel cell does not have aircraft style positive seal filler neck/cap system, ball type filler rollover valve is required. Spring or flapper.
7. Pick up must be on top or right side of cell.
8. One fuel filter allowed.
9. No cool cans.
10. One naturally aspirated 2 or 4-barrel carburetor only. One carburetor adaptor/spacer allowed 1” max

Fuel

1. Gasoline or E85 only. No race fuel or Alcohol allowed.

Weight

1. Minimum 2400 pounds, no tolerance, after race with driver in car.
2. No weights and/or loose objects in driver compartment, above interior deck or outside body.
3. Weights must securely be mounted to the frame or roll cage and painted white with car number on it. No weights shall be mounted on suspension parts or rear end.
4. Must be attached with at least ½” bolts.
5. No titanium, magnesium or carbon fiber products. Exceptions are carbon fiber rock guard and hood scoop.
6. Steel or aluminum fasteners only.
7. Cars using an open motor must weigh 2450 pounds.

Battery/Starter

1. One 12-volt battery only must be securely mounted between frame rails, and a positive terminal must be covered.
2. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided.

Gauges/Electronics

1. No unapproved transmitting or listening devices (exception is a one-way Raciever radio by officials, and transponder device mounted on rear axel. Right side only)
2. No electronic monitoring computer device capable of storing or transmitting information except memory recall analog tachometer.
3. No electronic advance curve ignitions allowed.
4. No unapproved or additional ignition accessories allowed. MSD with chips only, and chips will be supplied to you by track officials.
5. All wiring must be visible for inspection.
6. No magnetos or crank triggers.
7. No electronic traction control devices. Cameras such as GoPro are allowed but can not be hard wired.
8. Must be MSD Soft-Touch Rev Control, part number 8728. A 6200 will be supplied by the track.
9. GM HEI distributors only. Ignition, rotors, caps, coil and module must remain OEM appearing, and mounted in the engine compartment.

Transmission/Driveshaft

1. Must have at least two forward gears and one reverse, plus a neutral position. With engine running and car in still position, must be able to engage the car in gear and move forward, then backward.
2. OEM production type or approved aftermarket transmissions allowed two-speed, three-speed and four-speed. No five-speed (or more) transmissions, “in and out” boxes, or quick-change device allowed.
3. Functioning shift levers must be in OEM location on all OEM production type transmissions.
4. Flex plates must be full steel, unaltered OEM, or OEM replacement.
5. Flywheel flex plate must be bolted to the engine between the clutch assemble and crankshaft and all driveline components within bell housing, and must rotate while the car is in any gear.
6. Manual transmissions must be one of the following designs:
    a) OEM Manual: Must have a standard OEM case and working disc-type clutch, explosion-proof steel bell housing only. One flywheel only. The diameter of the clutch disc must be a minimum of 5½”. Clutch assembly must be steel. Bell housing can have only a hole for throw-out bearing lever or hose. No reverse mount starter allowed. Starter must mount to block only. Aftermarket explosion-proof steel bell housing mandatory.
    b) Manual: Standard Bert, Brinn, Falcon, and GM 3 speed or 4 speed style transmissions. By standard style, we mean standard. No magnesium. No ball splines. No Brinn-predator, or Pro 2.0. No Bert Gen 2. No Falcon roller slides or Eliminator, ETC. If you have a question about the legality of your transmission choice, please ask before you spend your hard earned dollars.
    c) Driveshaft: Steel slip-yokes only. Minimum 2” diameter steel driveshaft and must be painted white. 360-degree driveshaft loop required and must be constructed of at least ¼”x 2” steel, or 1” tubing, mounted 6” back from front U-joint.

Engine Compartment

1. The rear of engine (bell housing flange) must be mounted at least 72” forward from centerline of rear axel.
2. Engine offset must be kept within 2” of center of front cross-member.
3. Minimum 11” engine height from ground to center of crankshaft.
4. The radiator must be mounted in front of the engine.
5. The cooling system may be modified.
6. Overflow tube must be directed to ground between frame rails.

Engine Specifications

1. All cars utilizing a GM602 crate engine must clearly display on both front roof posts the word “CRATE”. Must be contrasting in color from body, minimum 2” tall. Markers are not acceptable.
2. Crate Engine: Must use unaltered sealed GMP88869602, 88958602 or 19258602 crate engines with GM seals. Upon inspection, any different, altered or missing GM seal bolts will result in no weight brake, you must weigh 2500lbs. All engines must use 6200 rpm rev limiting chip.
3. Open Engine: GM 350. Steel engine block only. Aftermarket performance blocks are not allowed. Weiand 8501, 8502, Edelbrock 7501, 7516, Vortec 602 crate intake: only intakes allowed. GM steel cylinder heads only. Steel oil pan only. Flat tappet cam/lifters and stud-mounted rocker arms only. Magnetic steel retainers only. No shaft, pedestal, or offset rocker arms, no titanium engine components, stud girdles or mushroom lifters. Lifter diameter and configuration must match OEM passenger block. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2). All engines must be able to be used in conventional passenger cars without alterations. Engine mounts cannot be removed or altered. Castings and fittings must not be changed. No machine work on the outside of the engine (no lightweight engine blocks). “Wet” sump oiling system only. Must use a 6200 RPM rev limiting chip, unaltered, no porting or polishing.
4. Coil Pack Engines are not allowed. NOTE: **NMS** reserves the right to implement a new rev-limiter-chip at any time. Limiter chips that are exchanged and found to have been altered may result in suspension.
5. The maximum compression ratio is 9 to 1. Compression ratio checked using whistler and cubic inches checked using pump or visual inspection of parts and pounds of compression will be checked. 155 max compression for **ALL** motors!
6. Cubic inch cannot exceed 360c.i.
7. Heads: steel only must be unaltered OEM, no aftermarket heads, maximum valve size on these is 2.02” intake and 1.60 on exhaust.
8. No porting, No polishing, No stud girdles, No roller tip rocker arms.
9. Guide plates and screw-in shouldered studs 0.375” max and polylocks are allowed.
10. Only 1.5 rocker arms. (steel)
11. Ford motors are allowed with matching 155 compression and No stroked motors. 302 or 351 only!
12. No angel plug-heads.
13. No stroker motors.

14. Unaltered OEM type harmonic balancer only. (8”x 1” only)
15. No oil coolers or remote oil filters.
16. Flat top pistons with relief or dish pistons. No dome pistons allowed.
17. Please use correct heads for 9 to 1 compression. Take the time to ask engine builders before building your motor so you do not exceed 9 to 1 compression.
18. No 400 blocks allowed.

You will be checked and rechecked for 9 to 1 compression. If you have any questions, please email the track at NorthernMichiganSpeedway@gmail.com